# Microsoft Excel

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**Lecture 1**

# What is Microsoft Excel and spreadsheet?

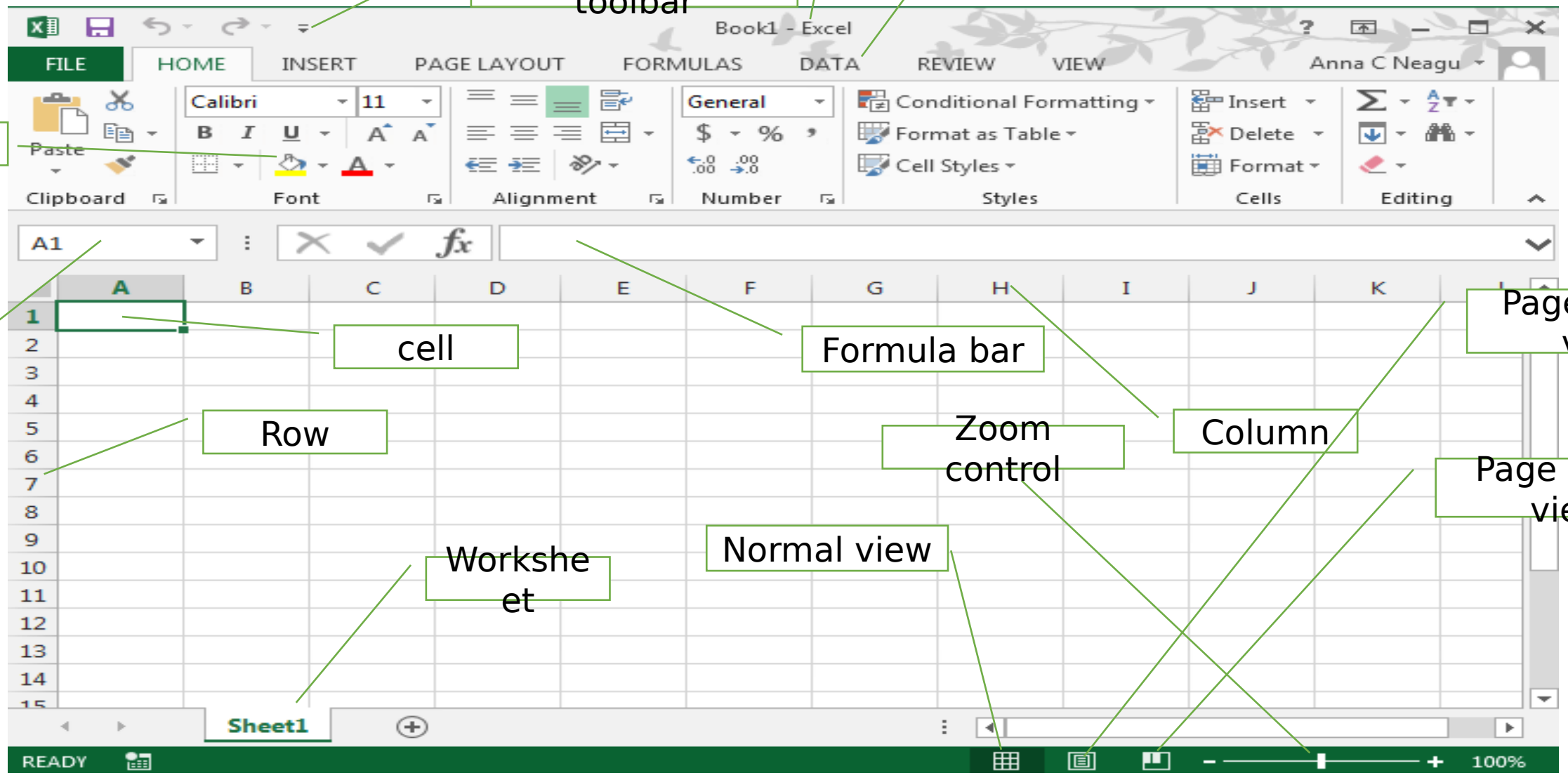
- Microsoft Excel is a spreadsheet tool capable of performing calculations, analyzing data and integrating information from different programs.

- A spreadsheet is a grid consisting of rows and columns. Each spreadsheet file (workbook) can contain many worksheets.

# File menu

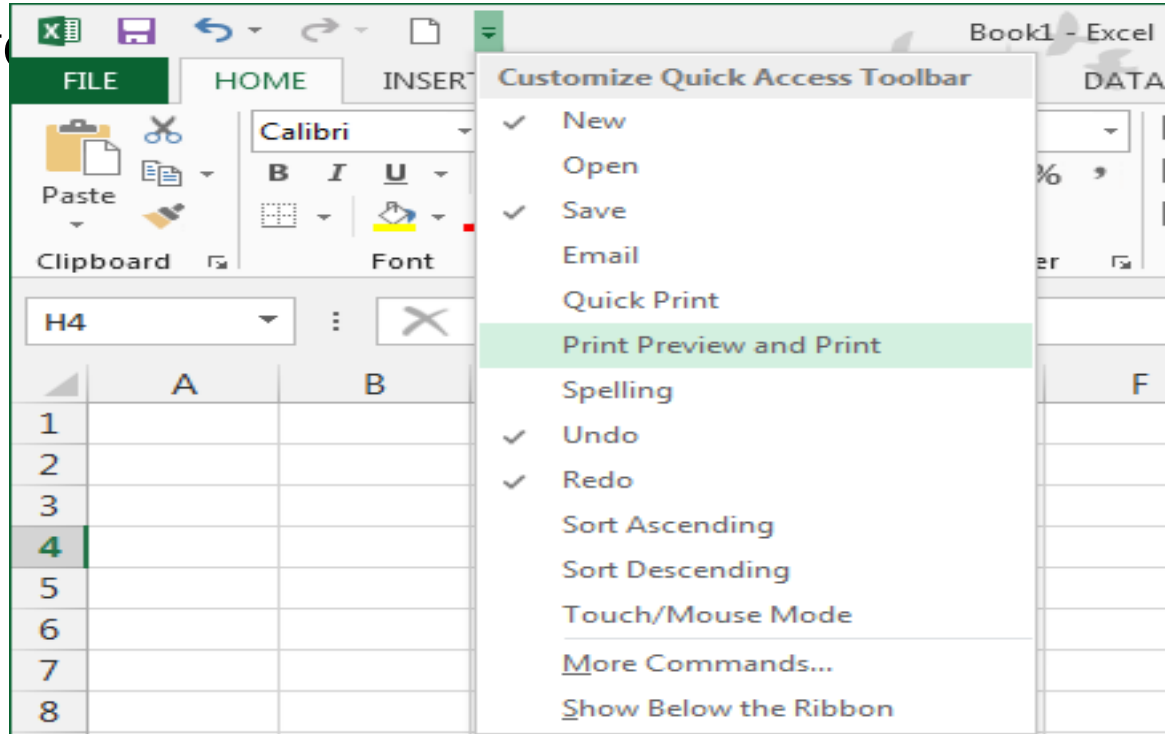
| | |
|---|---|
| New | To create a new worksheet(ctrl+N) |
| Open | To open excel file that have been saved).ctrl+o( |
| Save | To save excel file(ctrl+S) |
| Save as | To change the name and location of excel file |
| Close | To close excel file(ctrl+w) |

# The Excel Interface



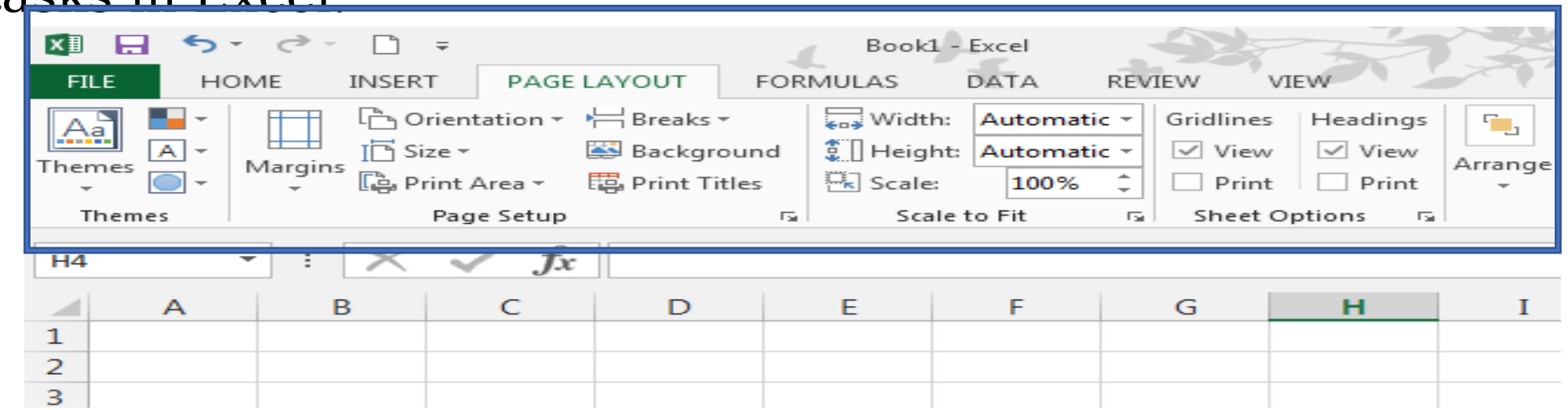
# The Quick Access Toolbar

- The Quick Access Toolbar lets you access common commands no matter which tab is selected. You can customize this toolbar based on y



# The Ribbon

- The Ribbon contains multiple tabs, each with several groups of commands. You will use these tabs to perform the most common tasks in Excel.



# Ribbon contains commands organized in three components

**Tabs −** They appear across the top of the Ribbon and contain groups of related commands. Home, Insert, Page Layout are the examples of ribbon tabs.

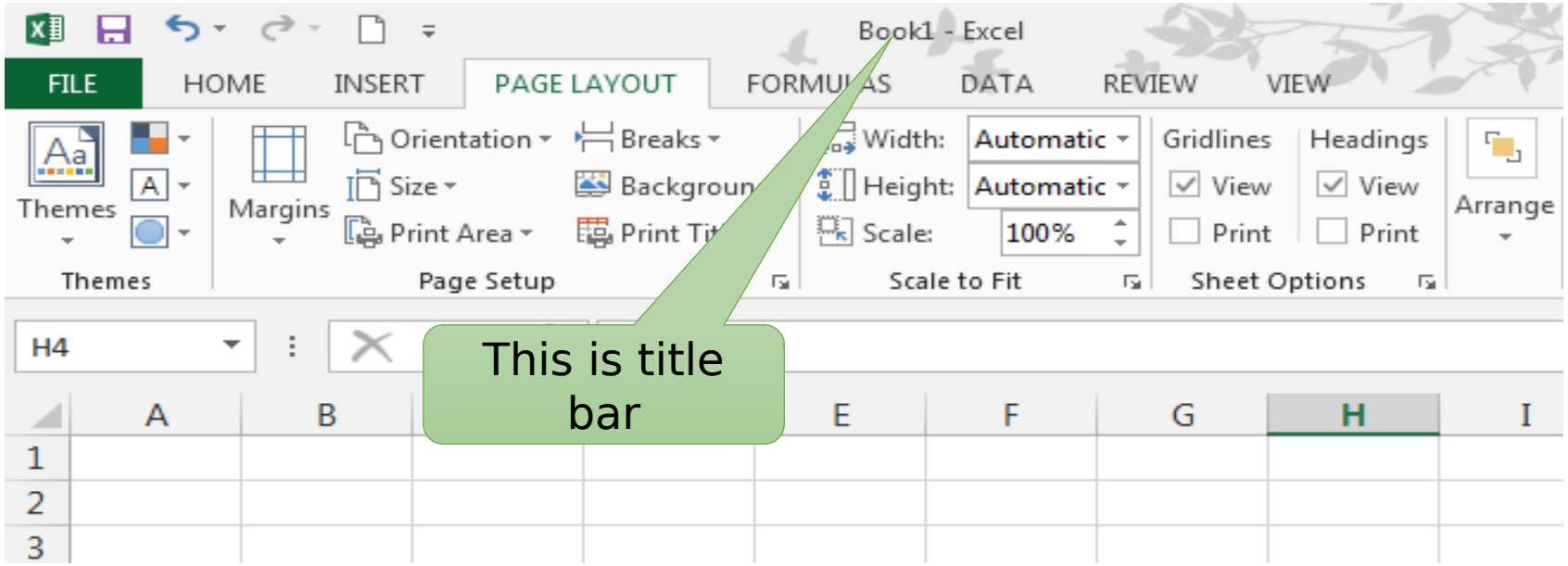
**Groups −** They organize related commands; each group name appears below the group on the Ribbon. For example, group of commands related to fonts or group of commands related to alignment etc.

**Commands −** Commands appear within each group as mentioned above.

# Title Bar

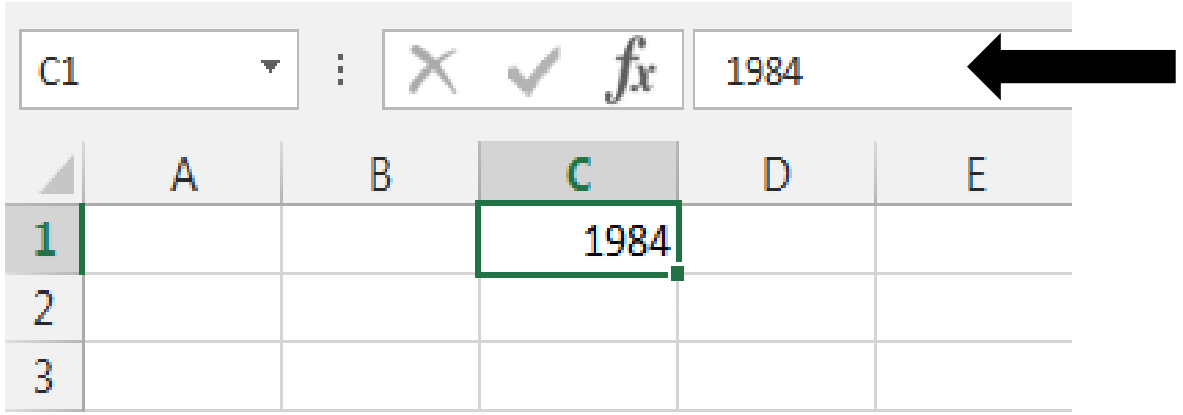
- This lies in the middle and at the top of the window.

Title bar shows the program and the sheet titles.



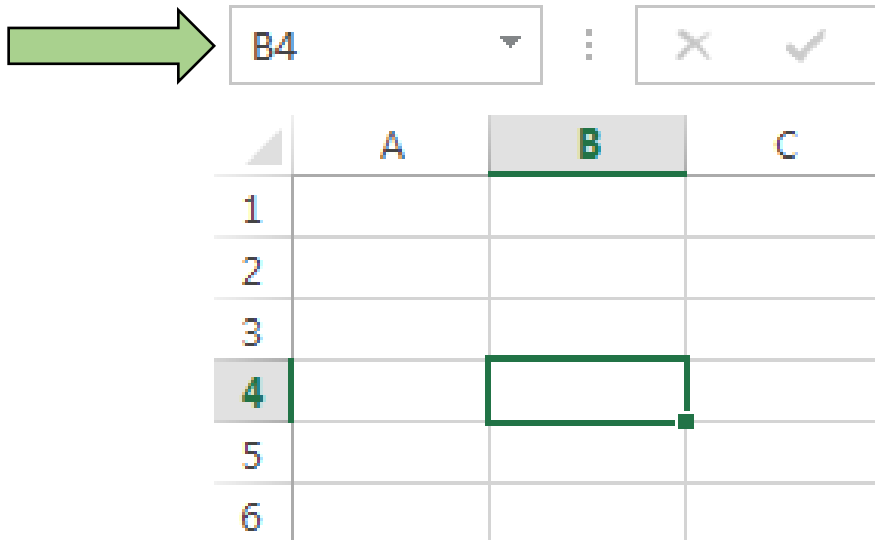
# The Formula Bar

- In the formula bar, you can enter or edit data, a formula, or a function that will appear in a specific cell.



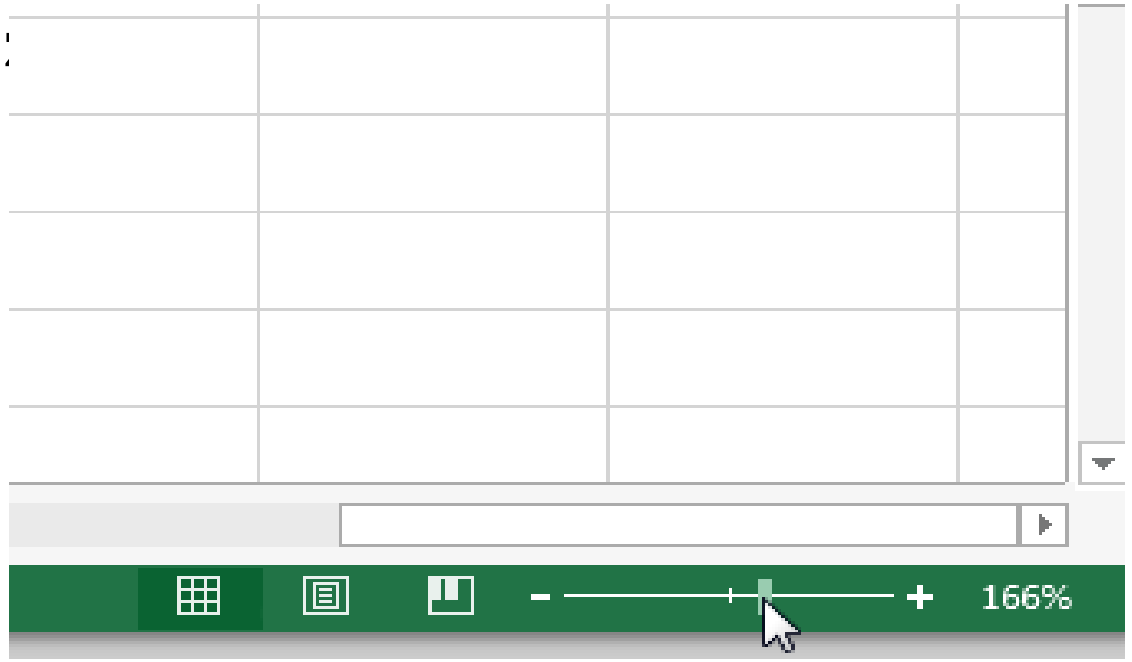
## The Name Box

- The Name box displays the location, or "name" of a selected cell



## Zoom Control

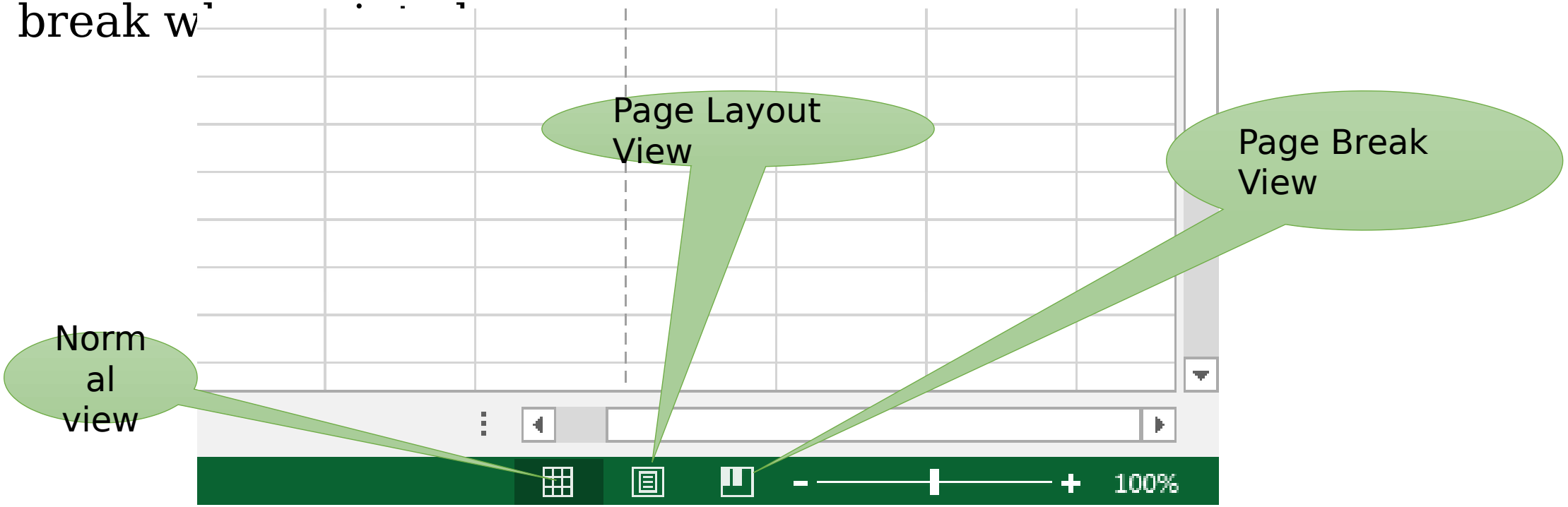
Zoom control lets you zoom in for a closer look at your text. The zoom control consists of a slider that you can slide left or right to zoom in or out. The + buttons can be clicked to increase or decrease the



**Normal Layout view −** This displays the page in normal view

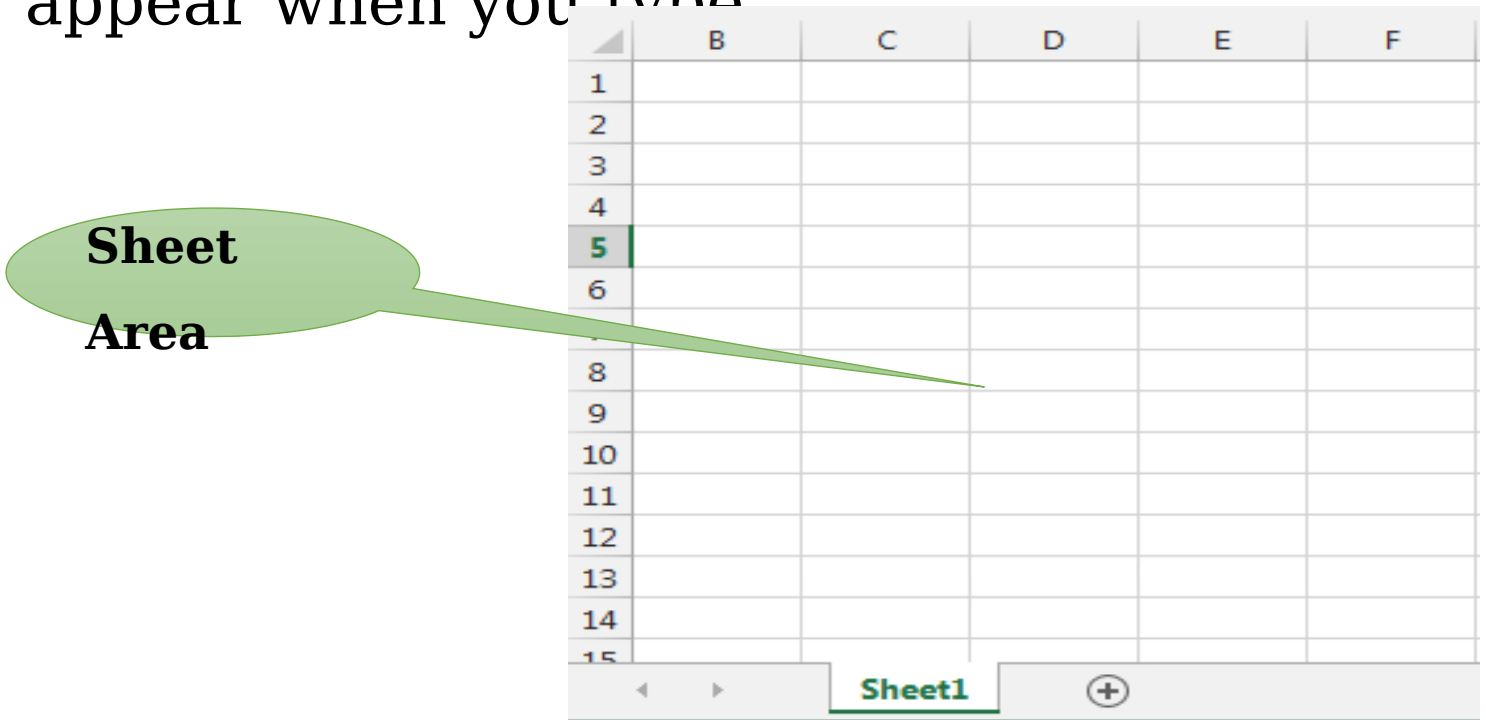
**Page Layout view −** This displays pages exactly as they will appear when printed. This gives a full screen look of the document.

**Page Break view −** This shows a preview of where pages will break w



## Sheet Area

The area where you enter data. The flashing vertical bar is called the **insertion point** and it represents the location where text will appear when you type

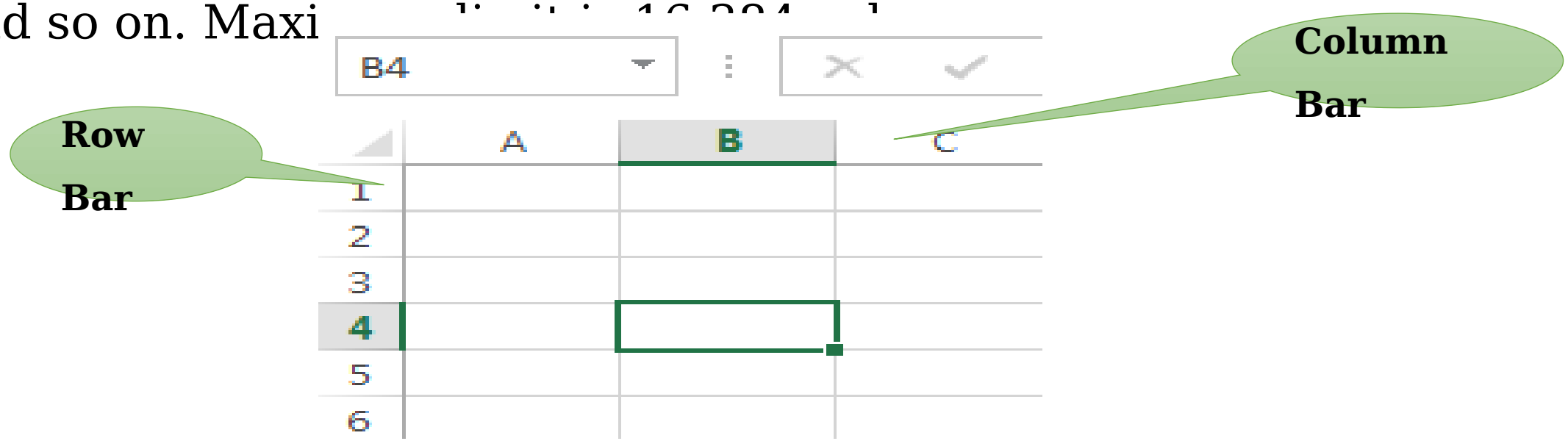


**Row Bar**

Rows are numbered from 1 onwards and keeps on increasing as you keep entering data. Maximum limit is 1,048,576 rows.

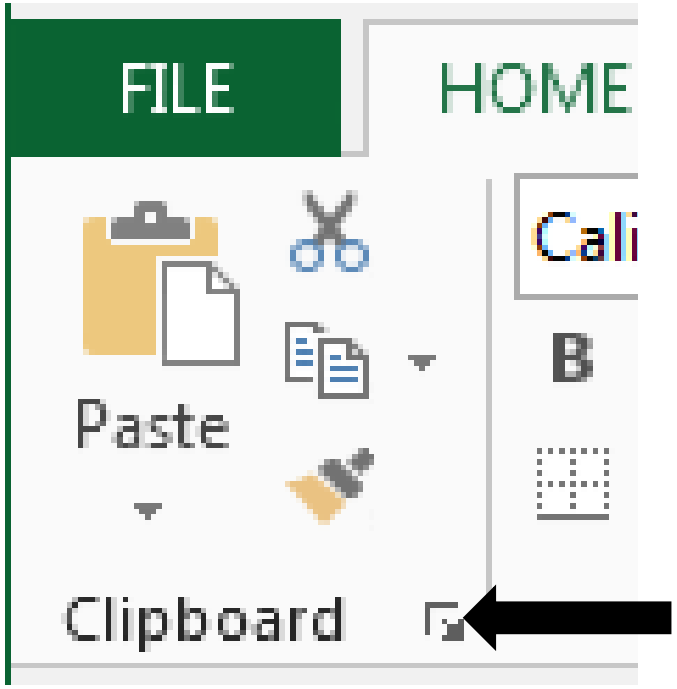
**Column Bar**

Columns are numbered from A onwards and keeps on increasing as you keep entering data. After Z, it will start the series of AA, AB and so on. Maxi



**Dialog Box Launcher**

This appears as a very small arrow in the lower-right corner of many groups on the Ribbon. Clicking this button opens a dialog box or task pane that provides more options about the group.



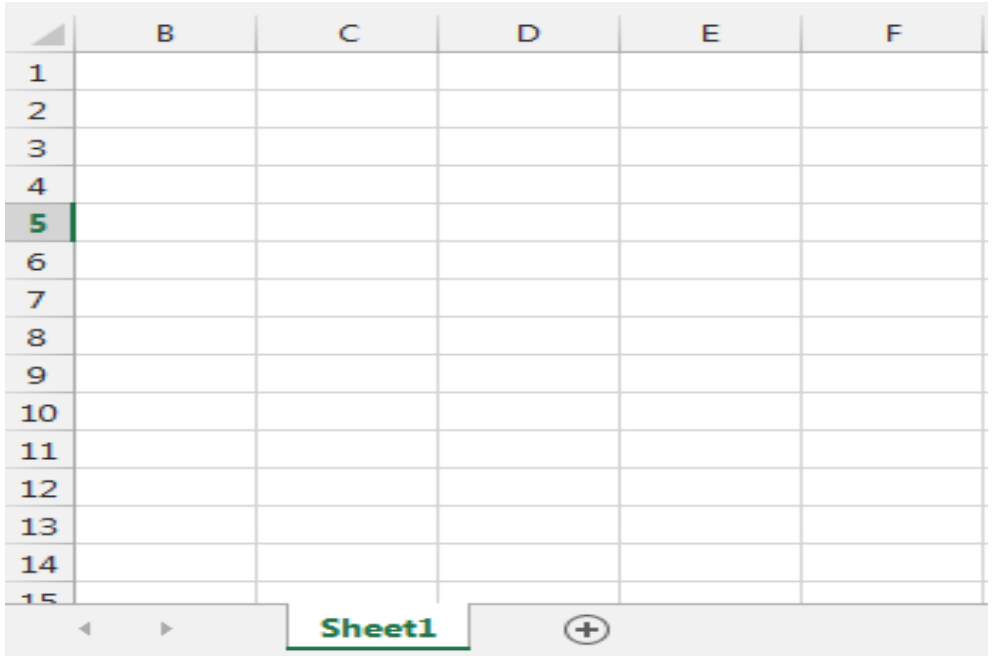
# shortcut

| To do this | Press |
| --- | --- |
| New workbook | CTRL+N |
| Save | CTRL+S |
| Undo | CTRL+Z |
| Redo | CTRL+Y |
| Cut | CTRL+X |
| P | |

| | |
| --- | --- |
| print | CTRL+P |
| Open files | CTRL+O |
| Find text | CTRL+F |
| Copy | CTRL+C |
| Paste all | CTRL+V |
| Paste special | CTRL+ALT+V |
| Close | CTRL+W |
| Exit Excel | ALT+F4 |

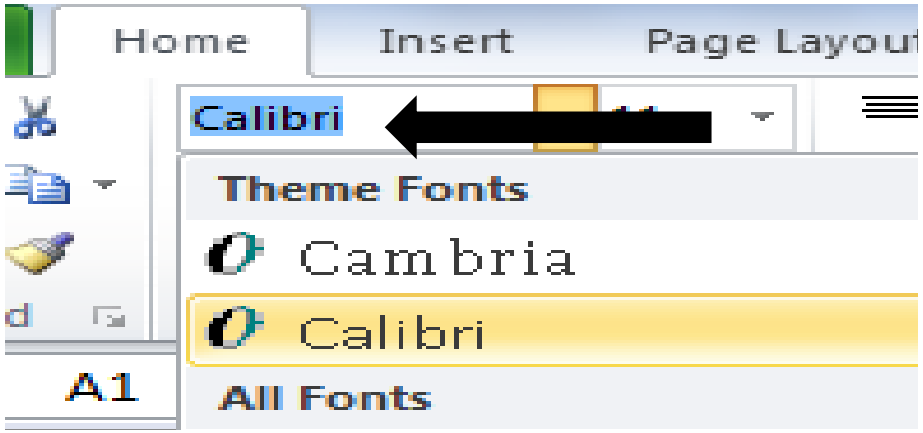
# The Worksheet

- Excel files are called workbooks. Each workbook holds one or more worksheets (also known as "spreadsheets").



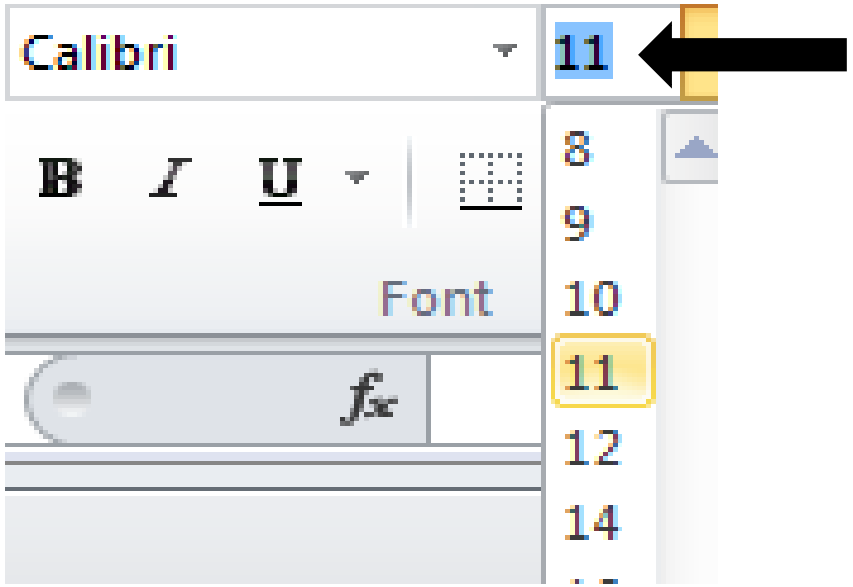
# Font types

To change the font type



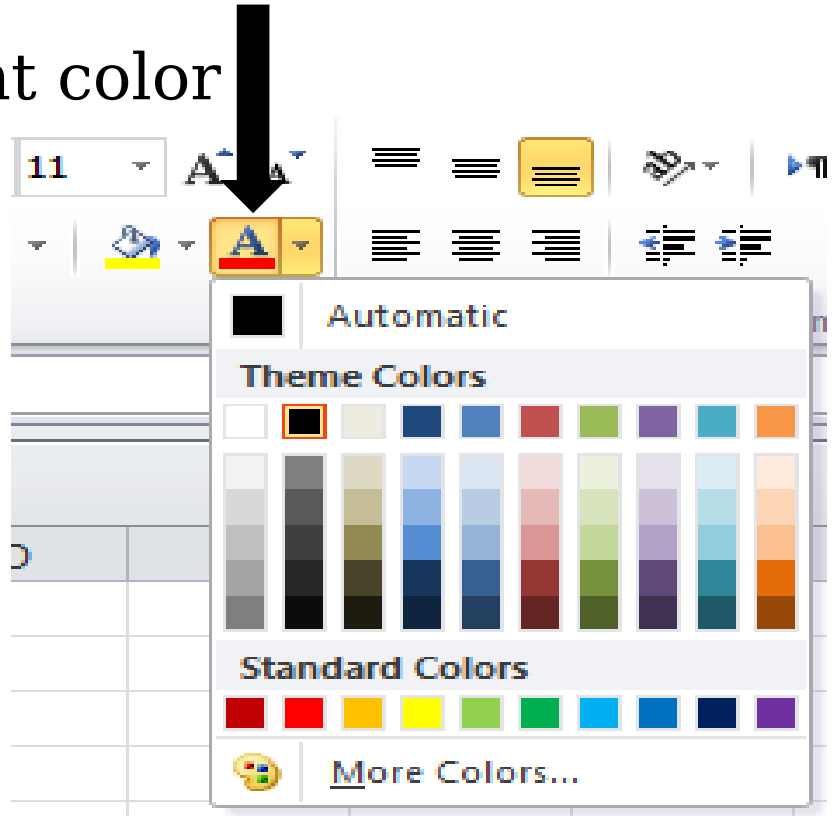
# Font Sizes:

To change the font size



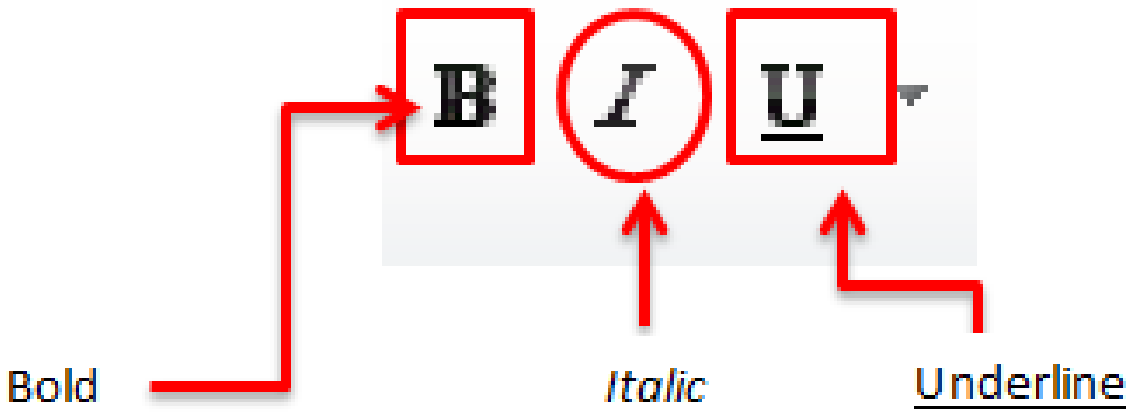
# Font colors

To change the font color



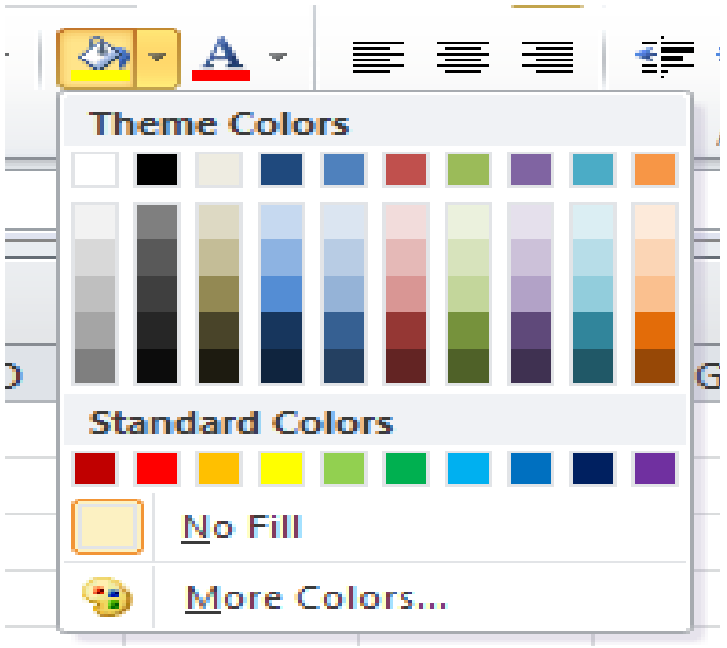
# Font Styles

To change the font style



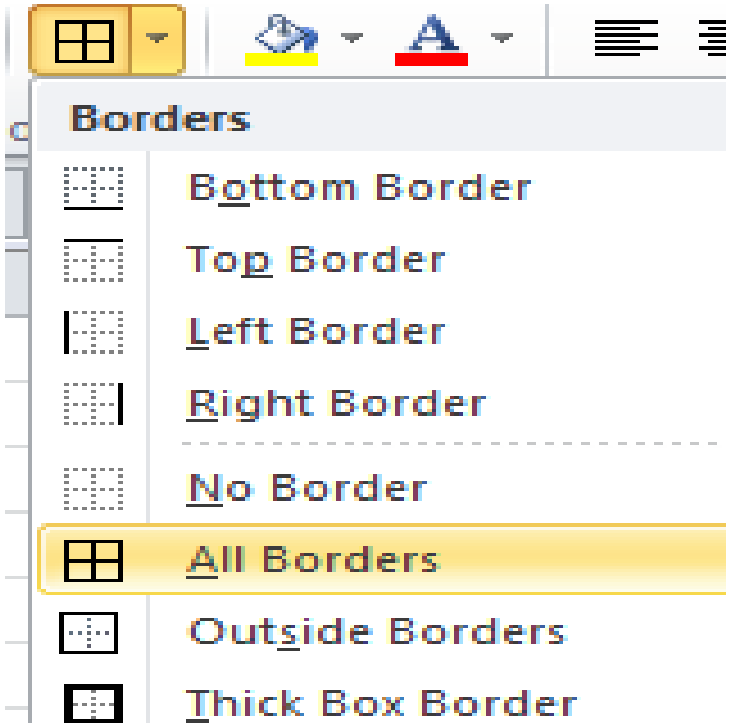
**Format cell Background:** used to change the background of cells.

**Removing cell shading**: to remove cell background.



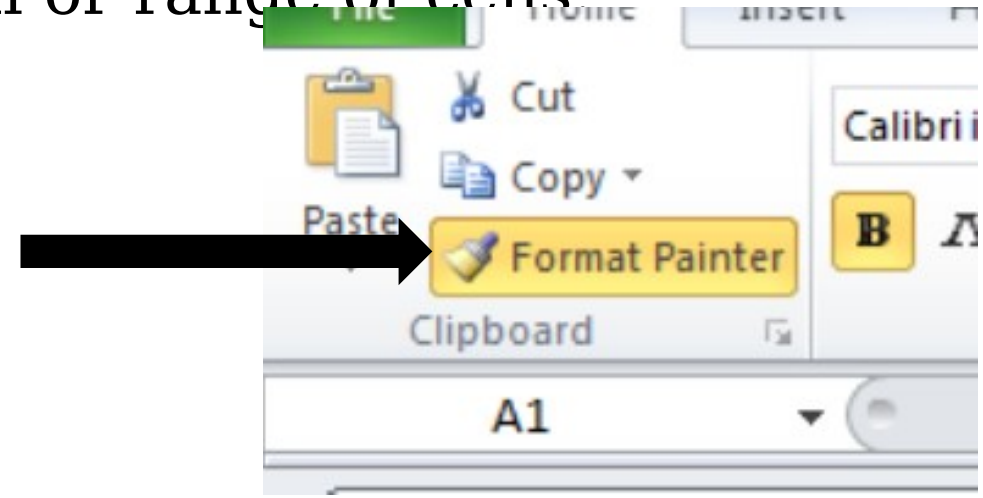
# Border Effects

To format cells with borders and lines, do the following



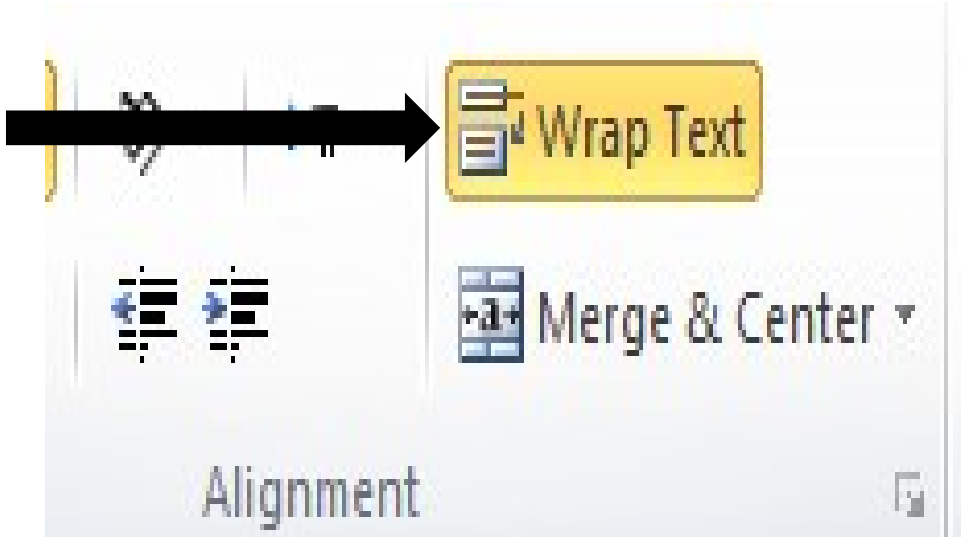
# Copy Formatting

Formatting can be copied by using the format painter. This tool enables you to copy formatting from one cell or range of cells to another cell or range of cells



# Text Wrapping

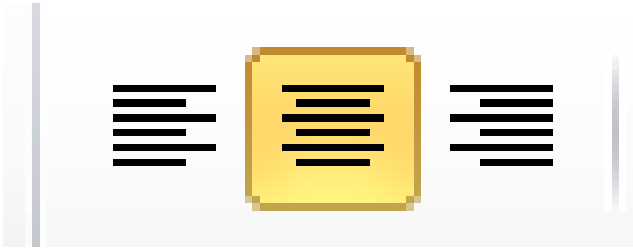
- , you may decide to wrap the text or merge the cell rather than resizing a column. Wrapping the text will automatically modify a cell's row height



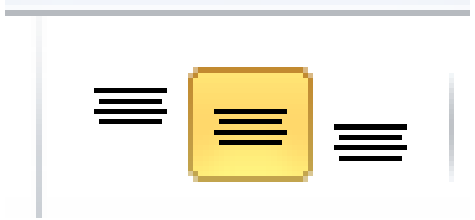
# Alignment

Cell contents can be aligned horizontally and/ or vertically

## A. Horizontally

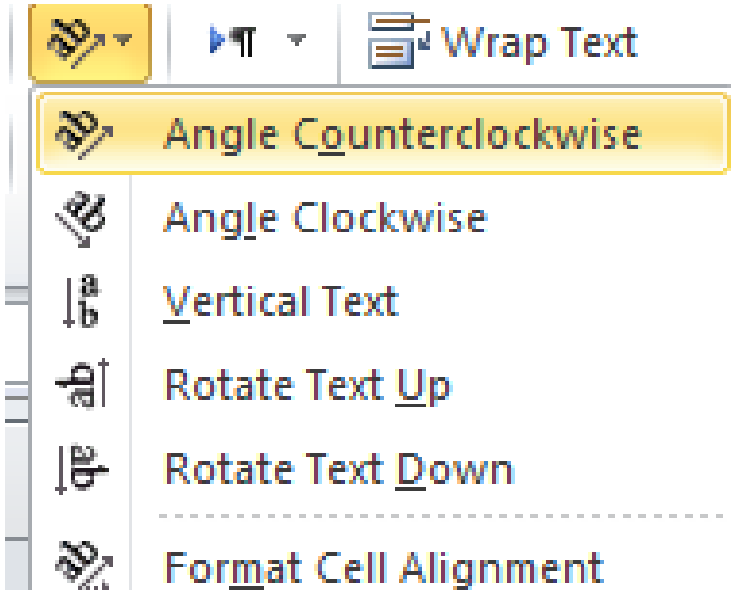


## B. Vertically



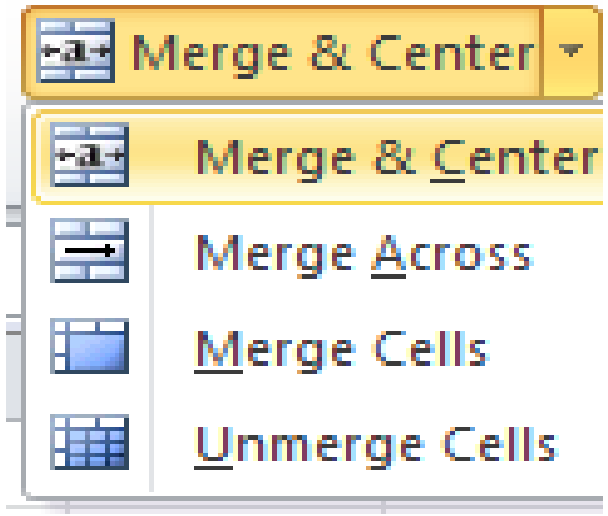
# Adjusting Cell Orientation

Allow you to rotate your text vertically or diagonally.



# Merging Cells

Used to merging more than one cell.

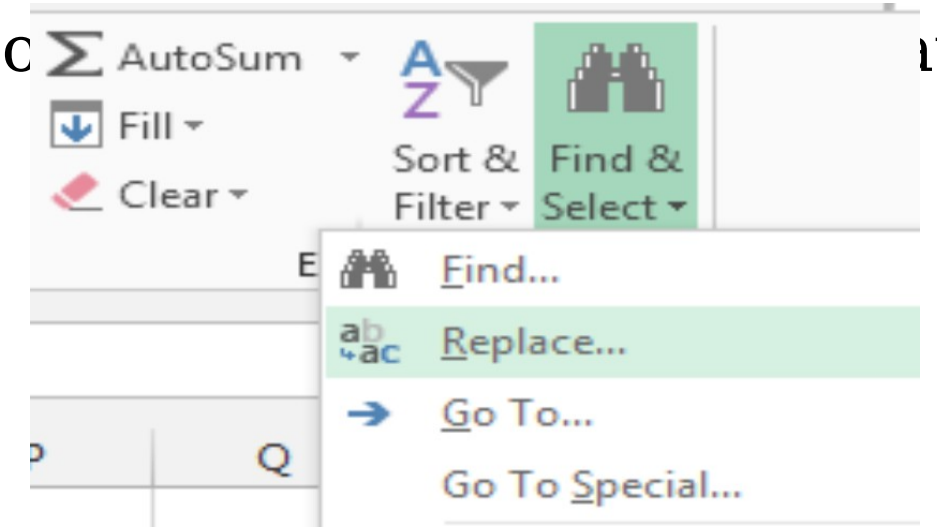


# Auto Recover

Excel automatically saves your workbooks to a temporary folder while you are working on them. If you forget to save your changes, or if Excel crashes, you can restore the file using Auto Recover.

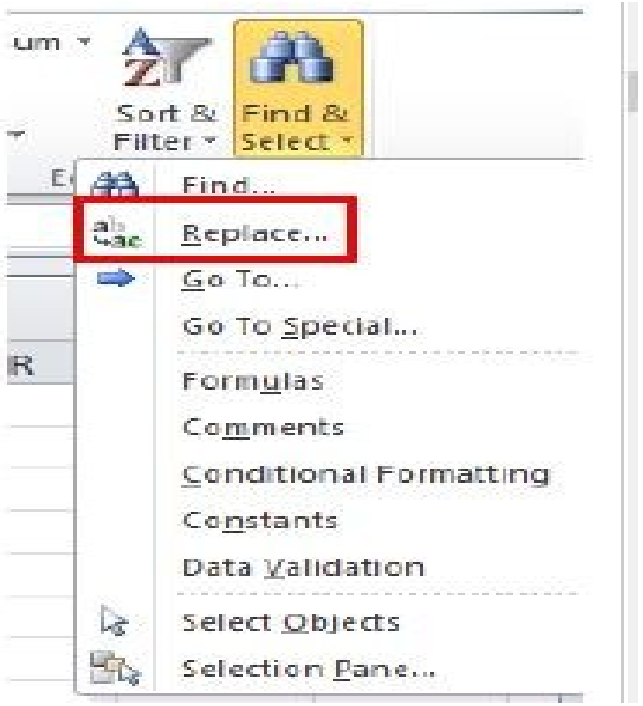
# Find

When working with a lot of data in Excel, it can be difficult and time consuming to locate specific information. You can easily search your workbook using the Find feature, which also allows you to modify cc ıture.



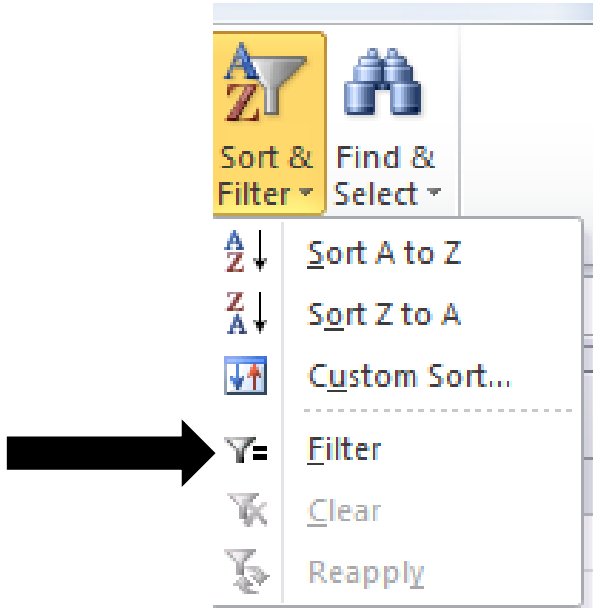
# Replace

You can replace the contents of multiple cells with another value



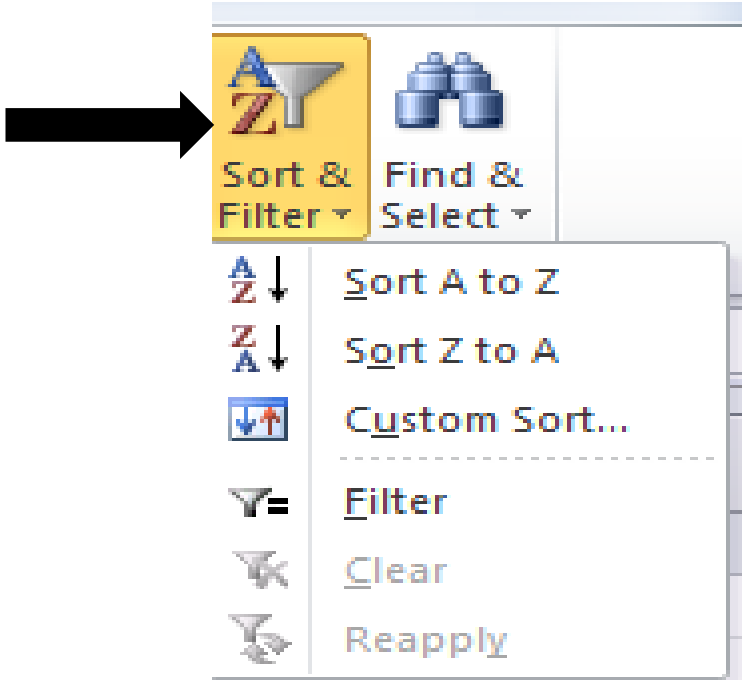
# Filtering Data

If your worksheet contains a lot of content, it can be difficult to find information quickly. Filters can be used to narrow down the data in your worksheet, allowing you to view only the information you need.



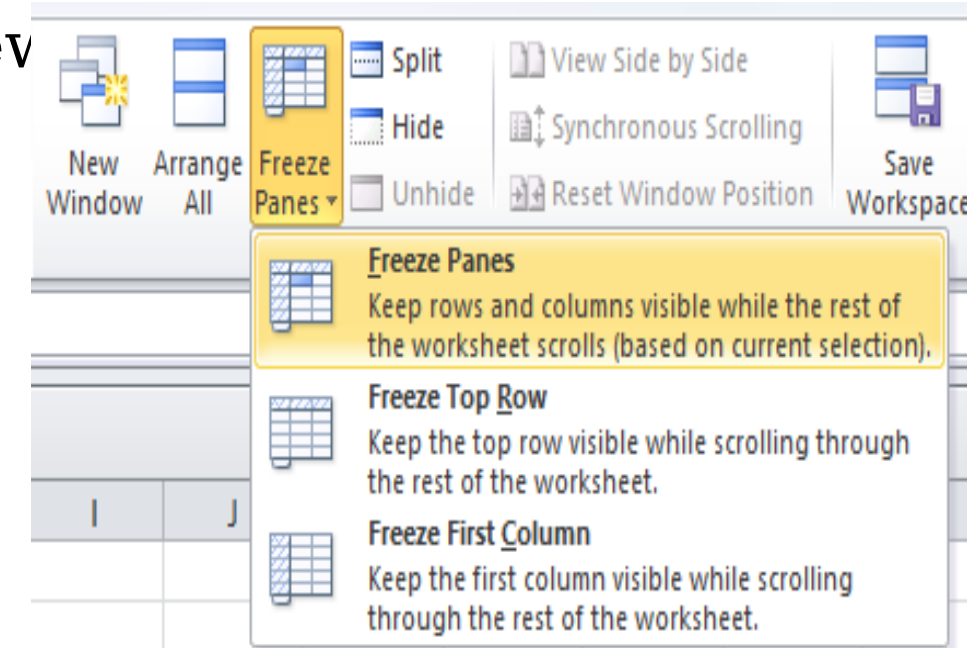
# Sorting

Data can be sorted to display in ascending or descending order in either numerical or alphabetical order.



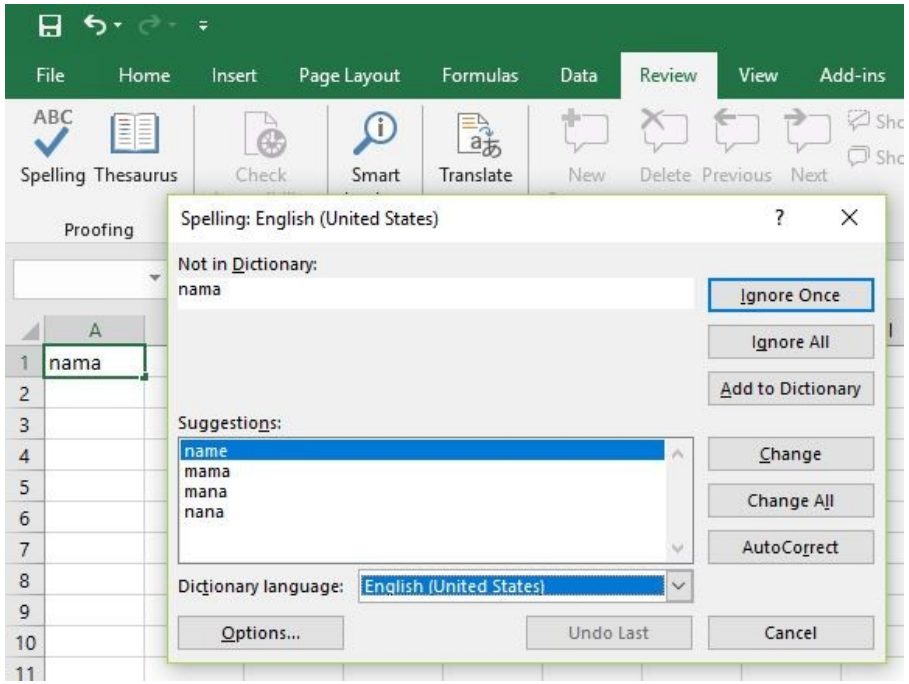
# Freezing and Unfreezing Row and/or Column Titles

You may want to see certain rows or columns all the time in your worksheet, especially header cells. By freezing rows or columns in place, you'll be able to scroll through your content while continuing to viev



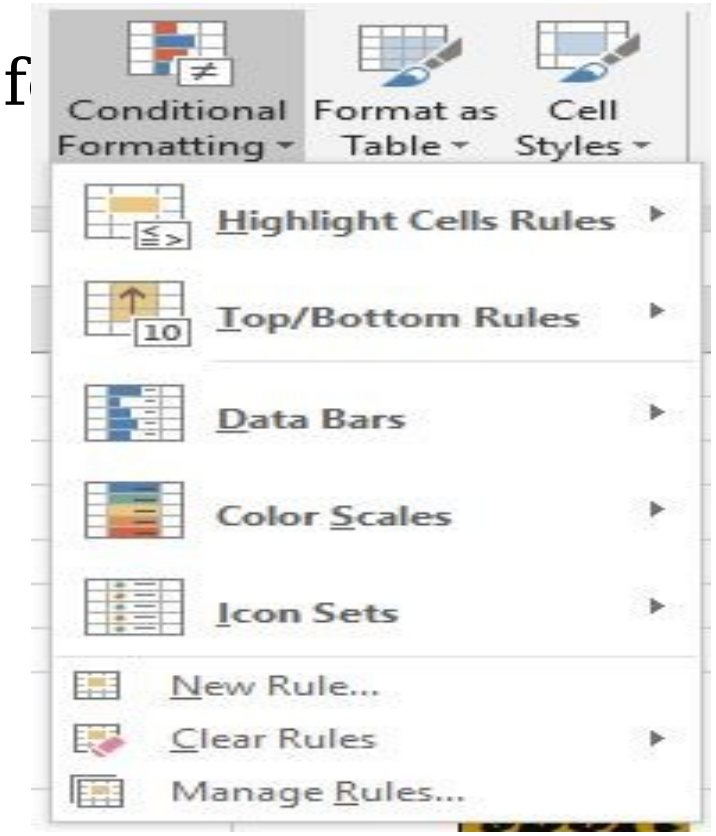
# Spell Check Basis

Spell check identifies and corrects misspelled words. It also allows you to search a document yourself for words you know you've misspelled



# Conditional Formatting

MS Excel 2010 Conditional Formatting feature enables you to format a range of values so that the values outside certain limits, are automatically f



# Pivot Charts

A pivot chart is a graphical representation of a data summary, displayed in a pivot table. A pivot chart is always based on a pivot table. Although Excel lets you create a pivot table and a pivot chart at the same time, you can’t create a pivot chart without a pivot table. All Excel charting features are available in a pivot chart

# Formulas and Function

Formulas and functions are used to create calculations and find results.

**Functions**: are used to find totals .

**Arithmetic Formulas** use arithmetic operators

Arithmetic Operators such as

Addition (+)

Subtraction (-)

Multiplication (*)

Division (/)

| | |
|---|---|
| =A1+A2 | Adds cells A1 and A2 |
| =C4-3 | Subtracts 3 from cell C4 |
| =E7/J4 | Divides cell E7 by J4 |
| =N10*1.05 | Multiplies cell N10 by 1.05 |
| =R5^2 | Finds the square of cell R5 |

| | |
|---|---|
| **sum** | This function adds all of the values of the cells in the argument. |
| **average** | This function determines the average of the values included in the argument. It calculates the sum of the cells and then divides that value by the number of cells in the argument. |
| COUNT | This function counts the number of cells with numerical data in the argument. |
| **MAX** | This function determines the highest cell value included in the argument. |
| **MIN** | This function determines the lowest cell value included in the argument. |
| sumif | Add the cells specified by a given condition or criteria |
| sumifs | Add the cells specified by a given a set of condition or criteria |
| countif | Count the number of cells within a range that meet the given condition |
| countblank | Counts the number of empty cells in specified range of cells |
| counta | Counts the number of cells in specified range of cells that are not empty |
| if | Check weather a condition is met,and return one value if true and another value if false |
| Vlookup | is an **Excel function** to lookup and retrieve data from a specific column in table. |
| and | The **Excel** AND **function** is a logical **function** used to require more than one condition at the same time |